

## Claims

1. A cylinder (01) of a rotary printing press which has a cylinder base body (02) and an outer cylinder body (03), through which a tempering medium can flow between the cylinder base body (02) and the outer cylinder body (03), characterized in that the circumference (24) of the cylinder base body (02) has a multiplex-threaded spiral-shaped conduit (17), and that the outer cylinder body (03) which conducts printing ink is not self-supporting over its length, is designed to be supported on the cylinder base body (02).

2. The cylinder (01) in accordance with claim 1, characterized in that the multiplex-threaded conduit (17) is embodied in the form of spiral-shaped grooves (17) with remaining strips (26) in the circumference (24) of the cylinder base body (02), which are covered by means of the outer cylinder body (03) supported on the strips (26).

3. The cylinder (01) in accordance with claim 1, characterized in that the conduit (17) is embodied to be octuply-threaded.

4. The cylinder (01) in accordance with claim 1, characterized in that a total cross section (Q) of the conduit (17) is designed at a ratio of 1:1200 to 1:1600 in respect to the shell surface (21) to be tempered.

5. The cylinder (01) in accordance with claim 2, characterized in that the ratio of a width (b26) of the strip (26) to the wall thickness (h03) of the outer cylinder body (03) is embodied to be less than or equal to 2, in particular less than or equal to 1.5.

6. A cylinder (01) of a rotary printing press which has a cylinder base body (02) and an outer cylinder body (03), through which a tempering medium can flow between the cylinder base body (02) and the outer cylinder body (03), characterized in that a gap (17) of an approximately circular profile, which extends in the axial direction (A), is embodied between the outer cylinder body (03) and the cylinder base body (02).

7. The cylinder (01) in accordance with claim 6, characterized in that the cylinder base body (02) and the outer cylinder body (03) are not supported on each other.

8. The cylinder (01) in accordance with claim 6, characterized in that a total cross section (Q) of the gap (17) is designed at a ratio of 1:200 to 1:600, in particular between 1:300 and 1:500, in respect to the shell surface (21) to be tempered.

9. The cylinder (01) in accordance with claim 6, characterized in that the gap (17) has a clearance (h17) of 2 to 5 mm.

10. The cylinder (01) in accordance with one of claims 1 or 6, characterized in that the cylinder (01) has a supply line (12) and a removal line (13) for the tempering medium.

11. The cylinder (01) in accordance with claim 10, characterized in that a journal (04, 06) has the supply line (12) as well as the removal line (13), which is arranged coaxially around the supply line (12).

12. The cylinder (01) in accordance with one of claims 1 or 6, characterized in that the cylinder (01) is designed as an inking roller (01).

13. The cylinder (01) in accordance with one of claims 1 or 6, characterized in that the cylinder (01) is designed as a screen roller (01).

14. The cylinder in accordance with claim 1, characterized in that the ratio (V) between a length (l03) and a wall thickness (h03) of the outer cylinder body (03) lies between 1:200 and 1:1200, in particular between 1:400 and 1:1000.

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